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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,662

11/06/2006

Rama Venkat

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

PHILOGENE, HAISSA

ART UNIT

PAPER NUMBER

2821

MAIL DATE

DELIVERY MODE

01/21/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,662	VENKAT ET AL.	
	Examiner	Art Unit	
	Haissa Philogene	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “interval timing circuit” (claims 8, 19 and 29) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

Art Unit: 2821

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 10-15, 21-27 and 31-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Mirskiy et al., Patent No. 5,973,455, cited by Applicant.

Mirskiy discloses in Fig. 2 a filament cutout circuit or electronic ballast for a fluorescent lamp (44, 45), comprising: a filament transformer (67 & 74-76) including a primary winding (67) and at least one secondary winding (74-76); and a cutout transistor (71) serially connected to the primary winding (67); wherein the secondary winding (74-76) provides a filament voltage capable of having a fixed polarity to at least one filament in the fluorescent lamp (44, 45) and wherein a fluorescent-lamp controller (51) electrically connected to the cutout transistor (71) that sends a filament control input signal that, via circuit (81, 82, 85) upon receiving voltage from a source (83), turns on the cutout transistor (71) for a predetermined time period to preheat the filament of the lamp during inherent consecutive cycles of an application of a switching power supply provided through inverter (31, 32) to a primary winding (41); wherein the cutout transistor (71) comprises a power metal-oxide-semiconductor field-effect transistor; wherein the at least one secondary winding (74-76) comprises a first secondary winding (74) connected to a first filament of the fluorescent lamp (44) and a second secondary winding (76) connected to a second filament of the fluorescent lamp (44); wherein the at least one secondary winding (74-76) comprises a first secondary winding (74) connected to a first filament of a first fluorescent lamp (44), a second secondary winding (76) connected to a second filament of a second fluorescent lamp (45), and a third secondary winding (75) connected to a second filament of the first fluorescent lamp (44) and a first filament of the second fluorescent lamp (45); wherein the third secondary winding (75) is connected to the second filament of the first fluorescent lamp (44) and the first filament of the second fluorescent lamp (45) in one of a series filament configuration or a parallel filament configuration; and further comprising: a cutout-transistor biasing network (81-83, see Col.4, lines 24-26) electrically connected to the cutout transistor (71).

Claims 18-20 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Krummel, Patent No. 5,854,538, cited by Applicant.

Krummel discloses a method of operating a fluorescent lamp (FL), comprising: receiving a filament control signal via transistor (HS); generating a filament voltage via transformer (TR) responsive to the filament control signal; maintaining the filament voltage for a predetermined time period sufficient to heat at least one filament (E1, E2) in the fluorescent lamp (FL) prior to igniting the fluorescent lamp (FL) (see Col.5, lines 15-34); and reducing the filament voltage upon expiration of the predetermined time period, i.e., after ignition or during normal operation of the lamp as switch HS is made non-conducting; wherein the filament control signal to switch HS is received from an interval timing circuit or lamp controller (4); wherein the generated filament voltage via transformer (TR) capable of having a fixed polarity for a predetermined time period to preheat the filament of the lamp (FL) during inherent consecutive cycles of an application of a switching power supply (UHB) provided through inverter (3) to the lamp (FL).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9, 16, 17, 28-30, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirskiy et al in view of Krummel.

As per claims 7, 16, 28 and 38, Mirskiy discloses the claimed invention substantially as explained above except for the cutout- transistor biasing network consisting of a bias resistor connected between the filament control input and a gate electrode of the cutout transistor, and a bias capacitor connected between the gate electrode and a source electrode of the cutout transistor. Krummel discloses in the figure a circuit having a matching network RC (not labeled) readable as a cutout- transistor biasing network consisting of a bias resistor (not labeled) connected between the filament control input provided by element (4) and a gate electrode of a cutout transistor (HS), and a bias capacitor (not labeled) connected between the gate electrode and a source electrode of the cutout transistor (HS) through common ground. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ cutout- transistor biasing network as taught by Krummel into the Mirskiy type system, because it would ensure a matching of a triggered voltage to the control input of a semiconductor switch during a pre-heating period.

As per claims 8, 9, 17, 29, 30 and 39, Mirskiy in view of Krummel the claimed invention substantially as explained above. In addition, Krummel discloses an interval timing circuit (4) electrically connected to a cutout transistor (HS), the interval timing circuit (4) providing a filament control signal to the filament control input of the cutout transistor (HS); further comprising a blocking capacitor (CK), wherein the blocking capacitor (CK) is serially connected between a switching power-supply input (UHB) and the primary winding (PR) of a filament transformer (TR).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogawa et al., Patent No. 4,682,080 ; Van Meurs et al., Patent No. 4,965,493 ;
Kroening, Patent No. 5,049,783.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 8:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on (571)272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Haissa Philogene/
Primary Examiner, Art Unit 2821

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